CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of increasing image processing performance, comprising:

copying image data of a selected subset of an entire image existing in an I/O RAM into ~~an extra second copy of said image data~~ a copy of the selected subset in a buffer in a main memory[[,]] by multiple calls to a memory copy function copying each image line of the selected subset ~~image~~ to a buffer line of the buffer;

performing CPU intensive operations on ~~the extra second copy of the image data~~ the copy selected subset in the main memory and not on the image [[date]]data in said I/O RAM to generate a processed image and storing the processed image in the buffer; and

~~after performing said CPU intensive operations,~~ copying the ~~operated on image data~~ processed image from the buffer in the main memory to the I/O RAM[[,]] by multiple calls to the memory copy function copying each buffer line of the buffer to an image line to generate a copy of the processed image in the I/O RAM.

2. (Previously Presented) The method of claim 1 wherein said main memory is cached.

3. (Previously Presented) The method of claim 1 wherein said main memory is cached in a CPU cache.

4. (Previously Presented) The method of claim 1 wherein said main memory is cached in an external cache.

5. (Currently Amended) The method of claim 1 wherein said copying of a selected subset of the entire image and the processed image in the I/O RAM comprises copying using DMA circuitry.

6-10. (Canceled).

11. (Currently Amended) The method of claim 1 wherein said I/O RAM is a display video RAM associated with a video digitizer output device configured to display the copy of the processed image.

12-15. (Canceled).

16. (Currently Amended) A machine for image processing comprising:

an I/O device including an I/O RAM for storing an entire image;

a buffer of a main memory for storing copied image data of an a copy of a selected subset of the entire image;

means for copying the selected subset of the entire image from the I/O RAM to the main memory to generate the copy of the selected subset by multiple calls to a memory copy function to copy each image line of the selected subset to a buffer line of the buffer;

a processor for performing computing intensive processing on said copied image data stored in said main memory the copy of the selected subset to generate a processed image and to store the processed image in the buffer; and

an I/O device including I/O RAM for storing source image data of said copied image data stored in said main memory; and

means for copying the processed image data between from said main memory and said I/O device by to the I/O RAM to generate a copy of the processed image in the display video RAM by multiple calls to the memory copy function to copy each image line from said I/O device to a buffer line of a buffer in the main memory, and each buffer line of the buffer in the main memory to an image line in the I/O deviceRAM.

17. (Currently Amended) The machine of claim 16 wherein said I/O device is a means for inputting an image RAM is a capture video RAM.

18. (Previously Presented) The machine of claim 16 wherein said I/O device is a means for outputting an image.

19. (Currently Amended) The machine of claim 16 wherein said processor is configured to executes programs to enhance~~, compress, encrypt,~~ or reformat ~~said image data~~ the copy of the selected subset to generate the processed image.

20. (Cancelled)

21. (Cancelled).

22. (Currently Amended) A machine for image processing comprising:

an image input device configured to capture an entire image and including a capture video RAM ~~storage medium~~ to store ~~image data of an~~ the entire image;

a buffer in a main memory to store ~~copied version of~~ a copy of the selected subset of the entire image~~said image data stored in said image input device~~;

means for copying the selected subset from the capture video RAM to the buffer to generate the copy of the selected subset by multiple calls to a memory copy function to copy each image line of the selected subset to a buffer line of the buffer;

a processor coupled to ~~the image input device and~~ the main memory ~~for performing computing intensive processing~~ and configured to perform an encoding operation on ~~said image data~~ the copy of the selected image to generated an encoded image for storage and thereafter to decode another instance of the encoded image to generate a processed image and to store the processed image in the main memory; [[and]]

an output device including a display video RAM; and

means for copying ~~said image data between said input device and said main memory by copying each image line from said input device to a buffer line of a buffer in said main memory, and each buffer line of a buffer in said main memory to an image line in said input device~~ the processed image from the main memory to a copy of the processed image in the display video RAM.

23. (Currently Amended) The machine of claim 22 wherein said processor is configured to ~~performs image processing to enhance or reformat image data~~ <u>to move the encoded image to a storage device from the buffer and thereafter to move the another instance of the encoded image from the storage device to the main memory</u>.

24. (Currently Amended) The machine of claim 22 wherein ~~said processor is configured to performs image processing to encrypt said image data~~ <u>image data of the encoded image is a selected one of compressed data, encrypted data, or enhanced data</u>.

25. (Currently Amended) The machine of claim [[22]]<u>23</u> wherein ~~said processor is configured to performs image processing to compress said image data~~ <u>image data of the processed image is a selected one of decompressed data, decrypted data, or enhanced data</u>.

26.-33. (Cancelled).

34. (New) The method of claim 1 wherein the CPU intensive operations enhancing or reformatting the image data of the copy of the selected subset to generate the processed image.

35. (New) The method of claim 1 wherein the main memory includes cache memory to store the copy of selected subset and the processed image.

36. (New) The method of claim 35 wherein the entire image includes a television video image including a visible portion visible on a display device and a non-visible portion not visible on the display device and the selected subset of the entire image substantially includes only the visible portion.

37. (New) The machine of claim 16 wherein the main memory includes cache memory to store the copy of selected subset and the processed image.

38. (New) The machine of claim 37 wherein the entire image includes a television video image including a visible portion visible on a display device and a non-visible portion not visible on the display device and the selected subset of the entire image substantially includes only the visible portion.

39. (New) The machine of claim 22 wherein the main memory includes cache memory to store the copy of selected subset and the processed image.

40. (New) The machine of claim 39 wherein the entire image includes a television video image including a visible portion visible on a display device and a non-visible portion not visible on the display device and the selected subset of the entire image substantially includes only the visible portion.